

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application.

Please amend the claims as follows.

Listing of Claims:

1.-2. (Canceled)

3. (Currently amended) An isolated polynucleotide according to claim 20 or 21 comprising, sequences encoding ~~at least two rWI2 heavy chain CDRs, selected from the group of CDRs consisting of:~~

the complementary determining region-1 (CDR-1) sequence NYWMT (SEQ ID NO:1),
the complementary determining region-2 (CDR-2) sequence SITSTGGTYHAESVKG (SEQ ID NO:2), and
the complementary determining region-3 (CDR-3) sequence DDYGGQSTYVMDA (SEQ ID NO:3).

4. (Currently amended) An isolated polynucleotide according to claim 20 or 21, comprising sequences encoding ~~at least two rWI2 light chain CDRs, selected from the group of CDRs consisting of:~~

the complementary determining region-1 ~~(CDR1)~~ (CDR1) sequence RASQDIGNYLR (SEQ ID NO:4), the complementary determining region-2 (CDR2) sequence GATNLAA (SEQ ID NO:5), and the complementary determining region-3 (CDR3) sequence LHHSEYPYT (SEQ ID NO:6).

5-8. (Canceled)

9. (Currently amended) An isolated expression vector comprising a first gene for the nucleic acid sequence that encodes a WI2 heavy chain and a second gene for the nucleic acid sequence that encodes a WI2 light chain.

10. (Original) An isolated expression vector according to claim 9 wherein said light and heavy chains are chimeric or are humanized.
11. (Original) A host comprising said expression vector according to claim 9.
12. (Currently amended) An isolated first expression vector comprising a gene for nucleic acid sequence that encodes a W12 heavy chain and an isolated second expression vector comprising a gene for the nucleic acid sequence that encodes a W12 light chain.
13. (Currently amended) An isolated first and second expression vectors according to claim 12, wherein said genes are for nucleic acid sequences encode a chimeric or humanized W12 light and heavy chain.
14. (Original) A host comprising said first and second expression vectors according to claim 12.
15. (Withdrawn) A method of stimulating an immune response in a patient against cancers expressing carcinoembryonic antigen, which comprises administering to said patient an effective amount of a vaccine comprising the humanized anti-idiotypic antibody or antibody fragment encoded by the nucleic acid of claim 21, conjugated to a soluble immunogenic carrier protein, optionally in combination with a pharmaceutically acceptable vaccine adjuvant.
16. (Withdrawn-amended) ~~In a~~ A method of diagnosis or treatment of a patient, wherein an antibody or antibody fragment that specifically binds CEA is used as a targeting, pre-targeting or therapy agent, either as such an unconjugated antibody or fragment or as a component of a conjugate,
the improvement wherein an anti-idiotypic antibody encoded by the nucleic acid according to claim 21 is used to clear ~~non-targeted~~ antibody or antibody fragment that is not bound to CEA.
17. (Canceled)

18. (Withdrawn) A method according to claim 16, wherein said anti-idiotypic antibody or antibody fragment is labeled with a radiolabel, an enzyme, or a fluorescent agent.
19. (Withdrawn) A vaccine, comprising the humanized anti-idiotypic antibody or antibody fragment encoded by the nucleic acid of claim 21, conjugated to a soluble immunogenic carrier protein, for use in stimulating an immune response in a patient against a cancer characterized by expression of CEA.
20. (Previously Presented) A nucleic acid encoding a chimeric anti-idiotypic antibody or fragment thereof, wherein said antibody or fragment thereof specifically binds to the idiotype region of an anti-CEA monoclonal antibody comprising the rWI2 light chain and heavy chain variable regions.
21. (Previously Presented) A nucleic acid encoding a humanized anti-idiotypic antibody or fragment thereof, wherein said antibody or fragment thereof specifically binds the idiotype region of an anti-CEA monoclonal antibody comprising rWI2 CDR regions-and humanized FR regions.
22. (New) A nucleic acid encoding an anti-idiotypic antibody or fragment thereof, wherein said antibody or fragment thereof specifically binds the idiotype region of an anti-CEA monoclonal antibody comprising CDR-1 sequence NYWMT (SEQ ID NO:1), CDR-2 sequence SITSTGGTYHAESVKG (SEQ ID NO:2), CDR-3 sequence DDYGGQSTYVMDA (SEQ ID NO:3), CDR1 sequence RASQDIGNYLRL (SEQ ID NO:4), CDR2 sequence GATNLAA (SEQ ID NO:5), and CDR3 sequence LHHSEYPYT (SEQ ID NO:6).